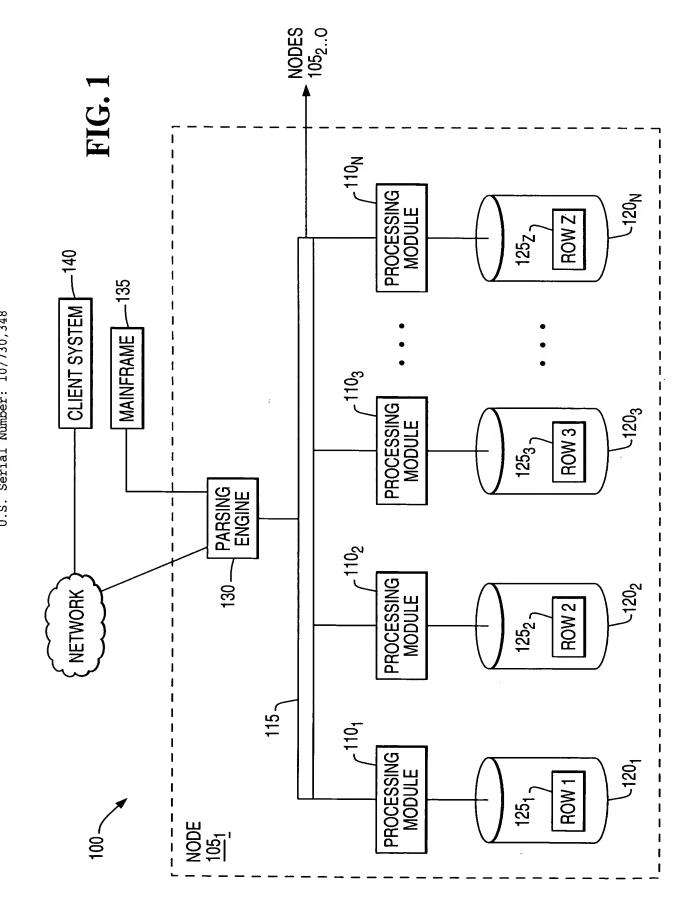
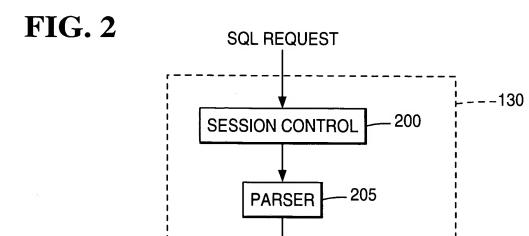
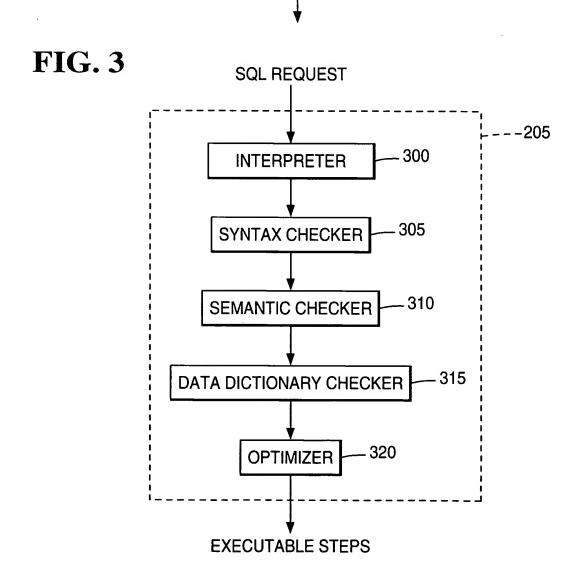
Replacement Sheet
Title: ADMINISTERING THE WORKLOAD OF A DATABASE SYSTEM USING FEEDBACK
Inventor: Douglas P. Brown et al.
U.S. Serial Number: 10/730,348

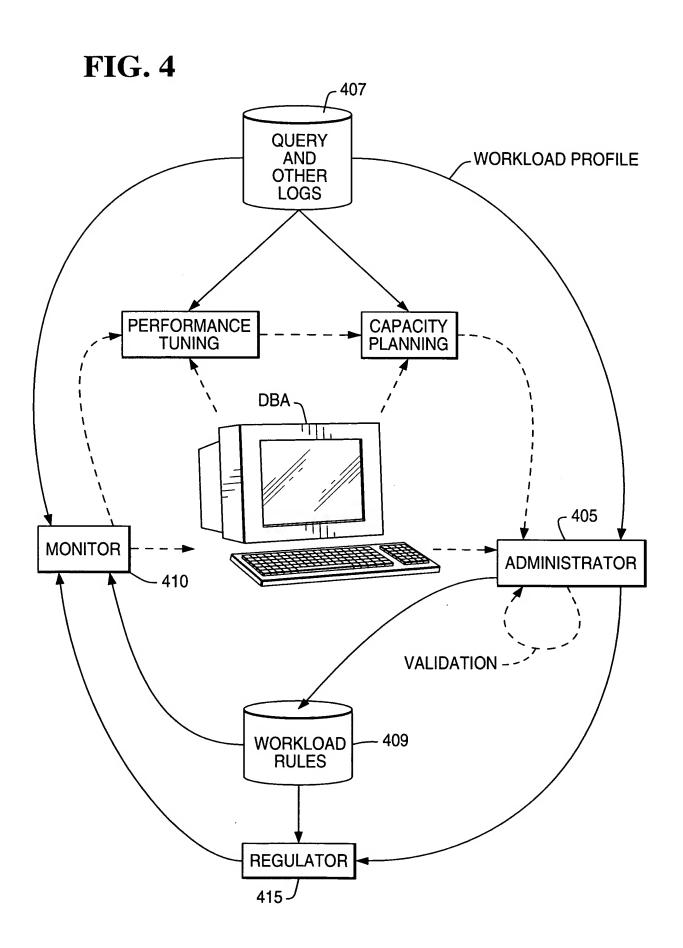


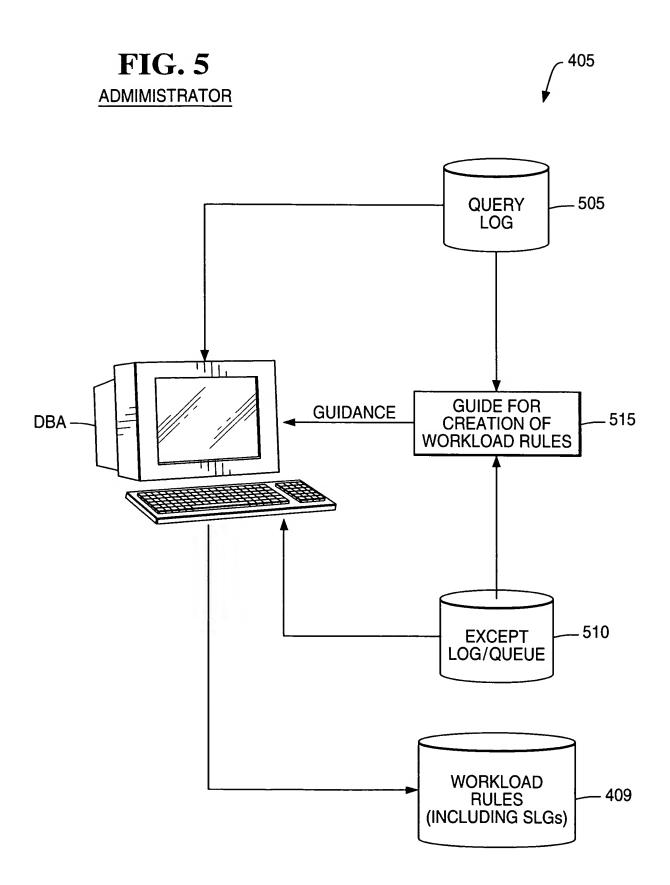


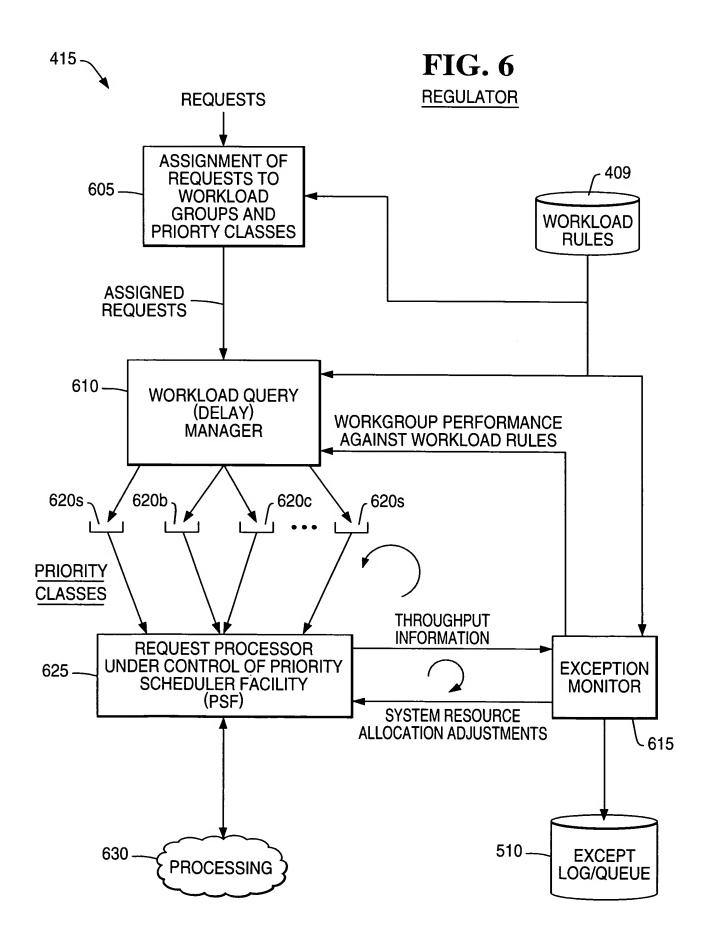
DISPATCHER

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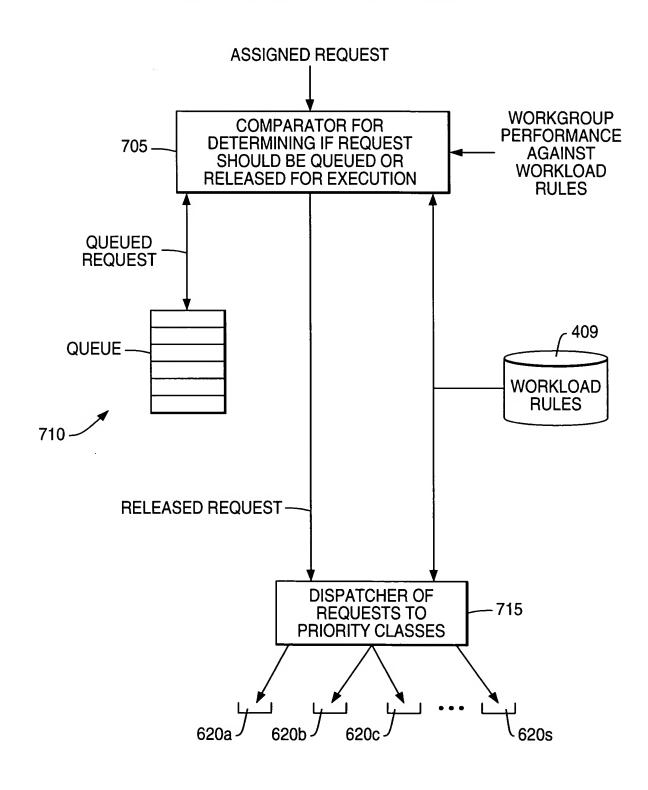




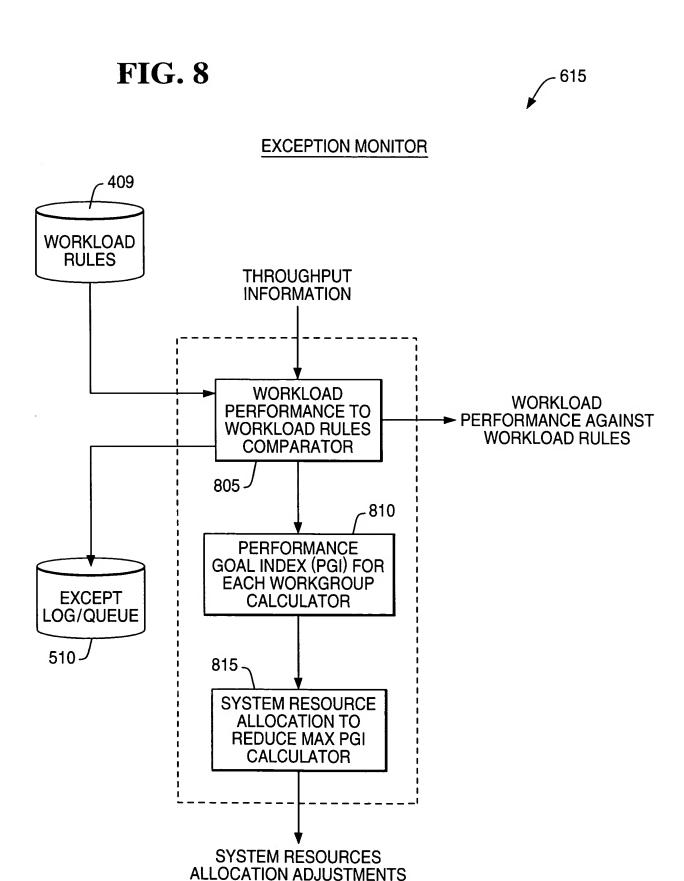




## WORKLOAD QUERY (DELAY) MANAGER



Inventor: Douglas P. Brown et al. U.S. Serial Number: 10/730,348



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		Workloads for 8AM - 10AM Reg. Weekdays	r 8AM - 10	JAM Reg.	Weekda		
	9 VIII O V I O	S. L. Goals	S. L. Goal				
WORKLOAD GROUP NAME	EXCEPTION CRITERIA	DESIRED RESPONSE & SERVICE LEVEL	ENFORCEMENT PRIORITY	OPERATING	ARRIVAL RATE	INITIATION	EXCEPTION PROCESSING
Inventory Tactical	Criteria	<= 1 sec @ 95%	Tactical	8AM - 6PM	75/sec	Expedite	Inventory Long Qry
CRM Tactical	Criteria	<= 3 sec @ 80%	Tactical	6AM - 6PM	25/sec	Expedite	Crm Analytics
Call Ctr Tactical	Criteria	<= 2 sec @ 90%	Tactical	7AM - 12PM	200/sec	Expedite	Call Ctr Reports
Sales Short Qry	Criteria	< 10 sec @ 90%	Priority	7AM - 12PM	500/hour	Exec	Log
CRM Short Qry	Criteria	< 2 min @ 75%	Normal	9AM - 3PM	35/hour	Delay	Log
SuperUser/Short DBA	Criteria	< 5 min @ 50%	Normal	8AM - 10AM	15/hour	Exec	none
Inventory Long Qry	Criteria	< 30 min @ 80%	Normal	all	3/hour	Exec	Alert
Call Ctr Reports	Criteria	< 20 min @ 80%	Normal	all	0.2/hour	Exec	none
Sales Cont Loads	Criteria	per arrival rate	Tactical	7AM - 11AM	5000/sec	Expedite	none
Inventory Batch	Criteria	none	Backgrnd	10PM - 9AM	unknown	Delay	Abort
<b>CRM Analytics</b>	Criteria	none	Backgrnd	10PM - 10AM	unknown	Exec	Abort
Sales Long Qry	Criteria	< 8 Hours @ 50%	Backgrnd	all	unknown	Exec	Abort
Development	Criteria	none	Backgrnd	8AM - 8PM	unknown	Exec	

FIG. 10

		EXCEPTION PROCESSING	Inventory Long Qry	Inventory Long Qry	Abort	
Operating Windows for Workload Inventory Tactical		INITIATION	Expedite	Expedite	Exec	
		ARRIVAL RATE	75/sec	20/sec	100/hour	
	30als	OPERATING WINDOW	8AM - 6PM	6PM - 12AM	12AM - 8AM	
		ENFORCEMENT OPERATING PRIORITY WINDOW	2	က	9	
	S. L. Go	DESIRED RESPONSE & SERVICE LEVEL	<= 1 sec @ 95%			
		WORKLOAD DIFINITION NAME	Inventory Tactical			

FIG. 11

Classification for|Inventory Tactical|

All Users with Account "Tactical Qrys" Who:

and User not in (Andy, John, Jane) and querybandID = "These are really tactical"

and Estimated time < 100ms and <= 10 AMPs involved What:

and Table Accessed = Daily Sales Where:

Where Classification: Table

Who Classification: Account ID User ID

Appl Executable ID Query Band ID Profile

What Classification:

**Estimated Rows** 

**AMPs Involved** 

**Estimated Time** 

Client User ID

Client Source or Address

Database View

Scan Access Join Type

## FIG. 12

## Exception Conditions for Inventory Tactical

CPU time > 500ms and

(( Disk to CPU Ratio < 50) or (CPU Skew > 40%))

for at least 120 seconds

Exception Workload Group: Inventory Long Qry

 If exception condition contains Blocked Time or Response Time criteria, no exception workload group is valid. The other exception processing options may still be used. (See exception processing options.)

Exception Criteria:
Spool Usage
Actual Rows
Actual CPU Time
Actual IO Counts
CPU Skew or IO Skew
Disk to CPU Ratio
Response Time\*
Blocked Time\*

Execution Initiation Instructions for Inventory Tactical 8AM - 6PM |

- O Execute (Normal)
- Expedite Execution
- Delay Until Delay Conditions

FIG. 14

# Exception Processing for Inventory Tactical 8AM - 6PM

- O Abort Request
- O Continue / Log Condition (Warning Mode)
- Continue / Change Workload Group to Inventory Long Qry | ▼
- O Continue / Send Alert to DBA ▼

## FIG. 15

